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EXAMINER

HOFFMANN, JOHN M

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/929,469

Applicant(s)

DAVIS ET AL.

Examiner

John Hoffmann

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10, 11, 13-21 and 26 is/are rejected.
- 7) ☒ Claim(s) 7-9, 12 and 22-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) xxx.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-14, 16-17, 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 and 26: There is no antecedent basis for "said ultra violet radiation". There is no prior mention of any radiation and therefore one could not discern what this refers to.

Claim 14 is not understood: The preamble indicates that the method is of the "type" where the fiber is drawn at a predetermined temperature and a predetermined tension. However the method also requires a step of lowering the temperature and increasing the tension. If these things are changed, the fiber is not being drawn at the predetermined temperature and tension - the fiber is being drawn at a different temperature and tension. Looking at it another way: the temperature and tension are being changed - thus there are two different temperatures and tensions - and therefore the method is of the "type" where the fiber is drawn at two different temperatures and tensions.

Claim 14: there is no antecedent basis for 'said temperature that said fiber is driven at' - the preamble only refers to the layer of glass being at a predetermined

temperature and not the temperature of the fiber. Furthermore, the fiber is cooled down to room temperature (at least 80% cooler) - not a mere 2-3%. The claim needs to indicate at what point the fiber is 2-3% cooler than it was before. Alternatively: The driving means for fibers is at a location where the fiber is very solid - it has cooled much more than 2-3%. Therefore the temperature at which the fiber is "driven" is far cooler than the 2-3% change.

Claim 16: it is unclear if "said temperature" is the temperature of b the fiber or of the molten glass.

Claim 17 is not understood: a rate can not be increased to a tension. A rate is in units of something like meters/seconds. A tension of is usually measured in grams (see instant claim 3). One of ordinary skill would be at loss as to understand what the claim requires.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6, 11,13, 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Beales 4566754.

The invention is taught at col. 4, lines 49-56 and col. 7, lines 43-57 of Beales (for claims 2 and 11. As to the preamble mention of "enhanced photosensitivity" - it is

deemed that this does not breathe life and meaning into the claim because there is no step of enhancing the photosensitivity which is recited. And, its photosensitivity is enhanced in as much as applicant's invention does -because the method is identical to applicant's claimed method.

Claims 4-6: See col. 4, lines 65-68.

Claim 13: As best understood, the claim is inherently met, because it has the same steps that present claims require.

Claim 14: As to the "type": this is not defined in the specification. It is deemed that any method where a preform is used in a furnace is of the "type" mentioned in the preform. AS to the increasing of tension: as the fiber cools, the tension of the fiber increases. At locations (above where the fiber is still molten and being deformed), the tension is lower, because some of the draw tension is being dissipated due to the elongation of the still molten portions. As the fiber cools to room temperature, its tension increases. On the way to room temperature, the fiber cools at least 2-3%. The claim does not preclude a further cooling step.

Claim 15: the predetermined temperature pertains only to the "type" of method - and not the actual method being claimed. Thus this temperature range does not substantially change the claimed steps.

Claim 16 is clearly met.

As best understood, claim 17 is inherently met.

Claim 18, see col. 4, lines 65-68.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 19-21, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antos 5999679 in view of Beales 4566754.

(Claims 1 and 3) Antos is directed to making a wavelength-compensating device (see Abstract). Col. 8, lines 1- 9 discusses the importance of loss in the 100 km device. Beales discloses that one can reduce the loss in germanium oxide-doped, monomode fibers by drawing at a lower temperature (col. 4, lines 49-64). It would have been obvious to one of ordinary skill to reduce the Antos loss by forming the fiber at the temperature(s) taught by Beales.

Claim 3: see col. 7, line 46 of Antos

Claim 10 requires that the tension remains constant. Col.7, line 46 of Antos states that the tension "averaged about 200 gm." It is deemed that this is a teaching that there is a single average and that this average remains constant. Examiner interprets present claim 10 as requiring that the tension remains essentially constant. It is common that there are minor fluctuations in fiber drawing process, including minor fluctuations in tension. It would have been obvious to one practicing the Antos drawing to keep the tension as relatively close to 200 gm as reasonably possible, because that is what Antos discloses the average tension to be.

Claim 19: It is deemed that 1950 C is "about 1985" (Beales col. 4, line 51).  
Alternatively, it is deemed that 1990 is about 1985 (Beales, col. 7, line 56.) "At least about 10% was held to be anticipated by a teaching of a content not to exceed about 8%, In re Ayers, 154 F 2d 182, 69 USPQ 109 (CCPA 1946)

Claim 20-21: MCVD is the same thing as inside CVD. This is taught at col. 4, lines 46-47 of Antos.

Claim 26: As best understood, the claim is inherently met, because it has the same steps that present claims require.

#### ***Allowable Subject Matter***

Claims 7-9, 12, 22-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 7-9, 12, and 22-25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis, Sarkar, Broderick, Kim, DiGiovanni and Anislie are cited as being relevant to the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

  
John Hoffmann  
Primary Examiner  
Art Unit 1731

5-28-03

jmh  
May 28, 2003